

July 22, 2016

■ Tobacco

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## *Innovation Invigorates Inhalables*

### **The Cowen Insight**

Innovation is driving renewed growth in the e-cig category. PAX's JUUL and MO's MarkTen XL look to be driving much of the category improvement, while RAI's Vuse is posting steady growth and NJOY's trends are recovering. While not driving a noticeable shift away from cigarettes, it is encouraging to see that better technology is again driving trial.

### **Trial Remains High, Maybe This Round of Innovation Drives Better Retention?**

For 10 consecutive months (through April 2016), we had been seeing notable declines in tracked-channel e-cig sales. However, the category has returned to growth in the last 2 months (in Nielsen). While that surely reflects the benefits of easier comparisons (which will persist), innovation also looks to be playing a role. While category retention remains low (~11.3%, according to RAI), new innovation could surely go a long way in terms of driving consumers to the vapor category. Indeed, in 2015, we saw a 100 bps improvement in retention rates, which was likely a function of national launches from RAI and MO. As companies race against the FDA clock (deadline for new product introductions is August 8), it is encouraging to see that new innovation is again driving trial in the category.

### **Nicotine Salts: Packs a Punch**

While much of the e-cig category is comprised of traditional liquid nicotine offerings, PAX Labs' JUUL utilizes nicotine salts technology. We recently met with management, and were impressed to learn that their research indicates that the nicotine uptake on JUUL is substantially better than for e-liquids that rely on free-base nicotine. While JUUL is super-premium priced, relative to traditional offerings (\$50 starter kit, \$4/cartomizer), after 1 year on the market, the product is now in 12,000 points of sale (with a ~7% ACV), with revenues up over 90% since the beginning of the year (sequentially). This good growth reflects notable trial and retention (which PAX believes is running 2x any competing brand), which we believe reflects the superior nicotine uptake delivered by this differentiated offering.


### **Opportunity to Win with Traditional E-Liquid**

Many of the smaller players in the e-cigarette category continue to face significant revenue pressure, with many posting consistent double-digit declines. RAI and MO (both with a \$10 starter kit) are bucking this trend, as both companies are seeing solid growth in e-cigs. For market share leader RAI, Vuse commands a 36% revenue share, posting dollar sales growth of 9% on a TTW basis. Retention looks to be quite good for RAI as more than 85% of sales are coming from cartridges. For MO, the company's updated MarkTen XL looks to be driving renewed growth for the brand family, as Nielsen data would indicate that sales have fully transitioned to this larger format offering. For NJOY, the company is targeting the value-end of the category with their Daily disposable e-cig (\$5.99). While revenues are still in decline, Daily has helped drive a material improvement.

### **Mindful of Sustainability**

We remain interested, but we think appropriately cautious, on e-cigs given the low levels of consumer retention that we see in the category. To be sure, current growth

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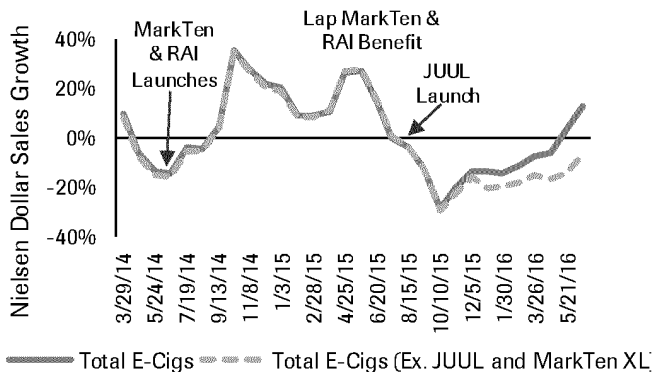


is encouraging, but also reflects the benefits of expanded distribution. Indeed, we still remember well the market share growth that LO saw with their blu offering in 2012/2013 (which was followed by declines in market share once the brand reached full distribution). For our public companies, these businesses thankfully still remain small, and have not at all disrupted the health of the traditional tobacco category in the U.S., where we remain constructive, given: (1) higher minimum wages, (2) lower levels of unemployment, and (3) still accomodative gas prices.

## Innovation Invigorates Inhalables

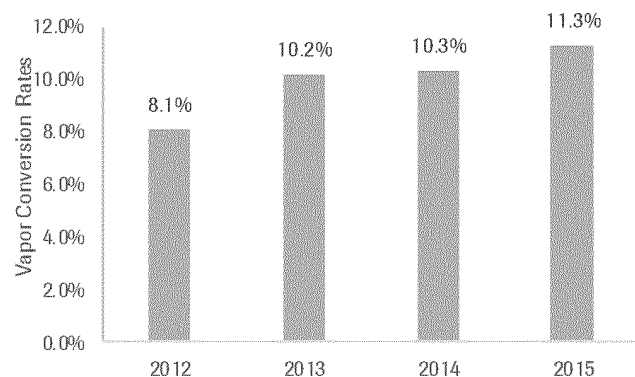
In the highly-fragmented e-cig category, trends have been mixed and quite volatile. After 10 consecutive months of dollar sales declines, the category has finally returned to growth. While in part that likely reflects the benefits of easier comparisons (which will persist), we believe that new innovation is also contributing to these improved trends for the category, in traditional tobacco outlets. While category retention remains low, these better trends could result in better consumer conversion. Indeed, in 2015, we saw a 100 bps increase in category retention, which we attribute to the national launches of e-cig offerings from RAI (Vuse) and MO (MarkTen).

Figure 1 E-Cig Category Finally Recovering...



Source: The Nielsen Company and Cowen and Company

Figure 2 ...Perhaps It will Drive Better Category Retention

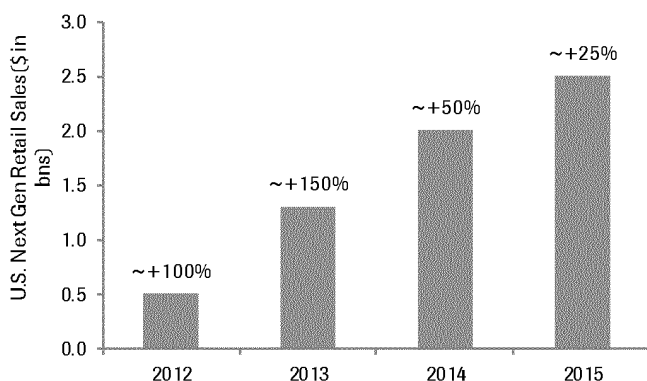


Note: Retention measured as reported exclusive vapor use relative to trial

Source: Company Reports and Cowen and Company

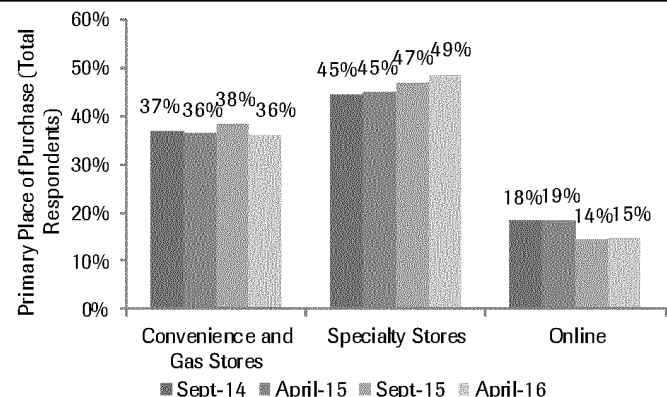
To be sure, the absence of robust growth in Nielsen channels only tells part of the story, given that over 50% of category sales occur outside of measured channels. Indeed, on a total category basis, growth has looked notably better, although it has decelerated, reinforcing the need for better innovation.

Figure 3 With Growth Slowing Overall...



Source: Company Reports and Cowen and Company

Figure 4 ...Better C&G Trends Would Clearly Help



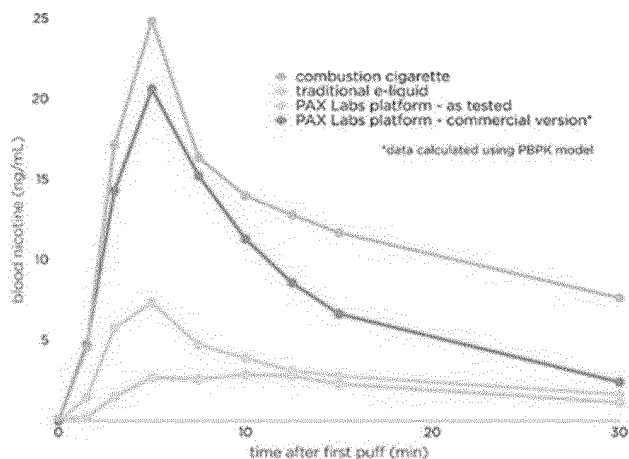
Source: Cowen and Company Next Gen Tobacco Survey, April 2016

Innovation looks to be a key driver of the improved trends. In particular, PAX's JUUL has gained particular traction, as has MO's MarkTen XL, while RAI's Vuse continues to grow at a respectable clip (also likely a function of innovation). And, while still in decline, NJOY has also seen some improvement in trend, following the launch of their Daily product.

### PAX Labs (JUUL)

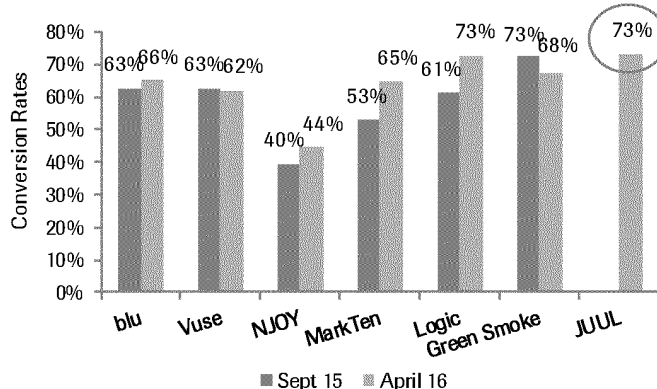
- Last week we met with PAX Labs CEO Tyler Goldman, as well as CFO Tim Danaher. The company's e-cig, JUUL, was a key focus as management believes the product's innovative technology can help smokers convert to less harmful e-cigs. Unlike most e-cigs, JUUL uses nicotine salts, as opposed to free-base nicotine, which provides the consumer with a more satisfying nicotine experience, more similar to that of a traditional cigarette. This agrees with our own Cowen Vaping Survey, where JUUL boasted the highest conversion rates among listed brands. JUUL first launched in June of 2015 and is now in 12,000 outlets, including Chevron, Circle K, Speedway, and Sheetz (with a ~7% ACV). JUUL's results thus far have been impressive, particularly given its super-premium positioning as starter kits retail for \$50 and a four-pack refill pack sells for \$16.

Figure 5 JUUL's Nicotine Salts Provide Greater Consumer Satisfaction...



Source: Pax and Cowen and Company

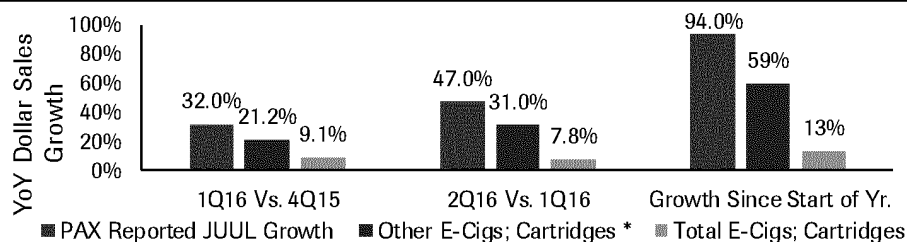
Figure 6 ...Fueling Conversion



Note: Defined as current use divided by trial use  
Source: Cowen and Company Next Gen Tobacco Survey, April 2016

Indeed, the company announced that dollar sales grew 94% in June 2016, compared to December 2015. While Nielsen data does not break-out JUUL, the SKUs are included within the cartridges segment. Using all "other" cartridges as a proxy for JUUL in our Nielsen data, these growth rates are readily apparent.

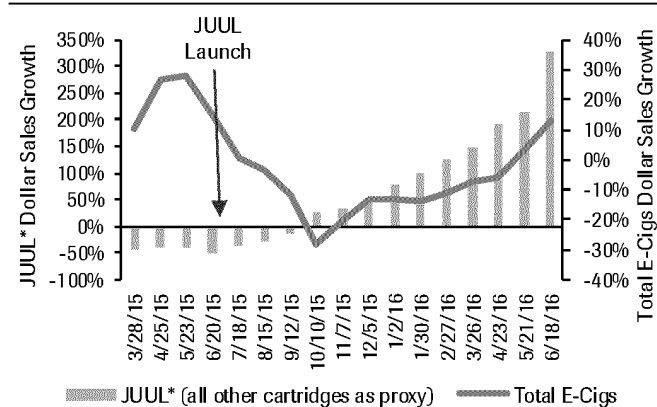
Figure 7 JUUL's Growth Has Been Impressive



Note: PAX Reported JUUL growth is according to IRI data; Other E-Cigs within the cartridges segment is used to represent JUUL trends as the brand is not broken out within Nielsen; Nielsen growth rates are not based off exact quarterly dates  
Source: Company Reports, The Nielsen Company and Cowen and Company

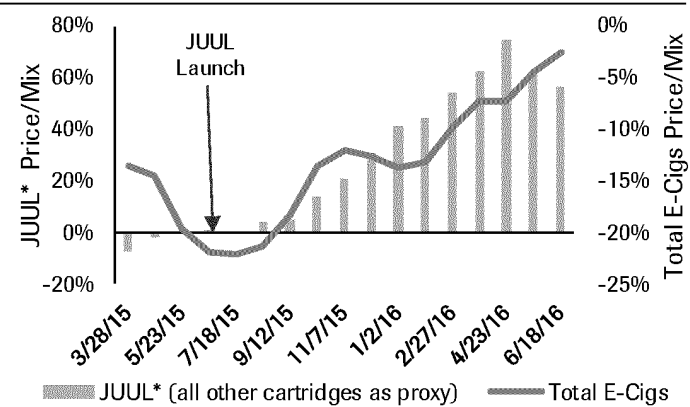
Since its launch in June 2015, trends have continued to improve, with growth accelerating each period this year. This has provided a nice lift for the e-cig category as a whole, including a ~200 bps benefit to category dollar sales growth in the most recent period. What is more, given JUUL's premium positioning, positive mix has also fueled better sales growth.

Figure 8 JUUL Growth Has Accelerated Every Quarter in 2016



Source: The Nielsen Company and Cowen and Company

Figure 9 JUUL's Premium Pricing Provides a Nice Benefit to Category Mix

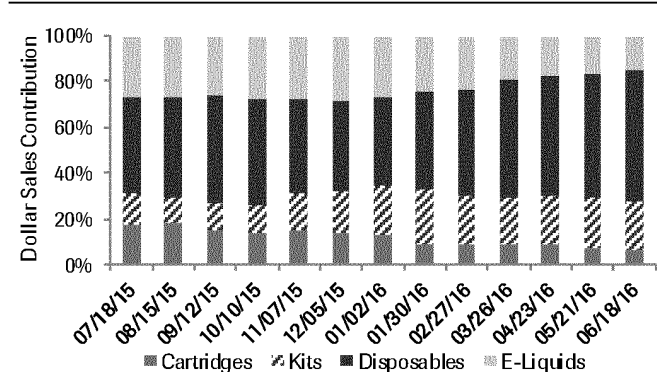


Source: The Nielsen Company and Cowen and Company

## NJOY

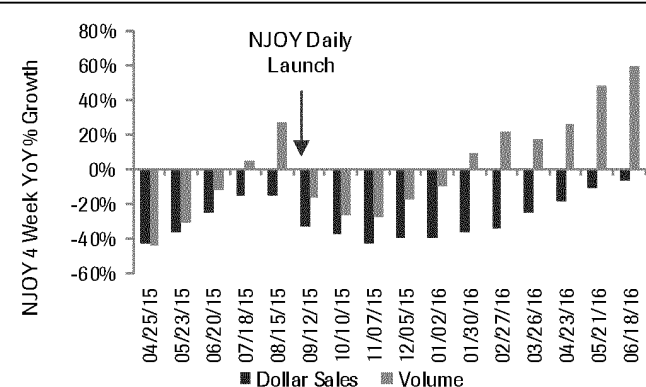
- For NJOY, the company's new product, NJOY Daily, launched in September 2015 has seen success in its early days. While many competitors have shifted to rechargeables, NJOY Daily is a disposable cigarette retailing for \$5.99, with its value positioning likely appealing to consumers. As NJOY doubled down with its investment in the disposable segment (as NJOY Kings are still being produced), disposables now make up nearly 60% of NJOY sales. While NJOY dollar sales and volume had been in decline for some time, the launch of Daily has contributed to a notable easing in dollar sales declines, while volumes have returned to growth.

Figure 10 NJOY Has Increased Its Exposure to the Disposable Segment



Source: The Nielsen Company and Cowen and Company

Figure 11 Daily's Helped NJOY Return to Volume Growth

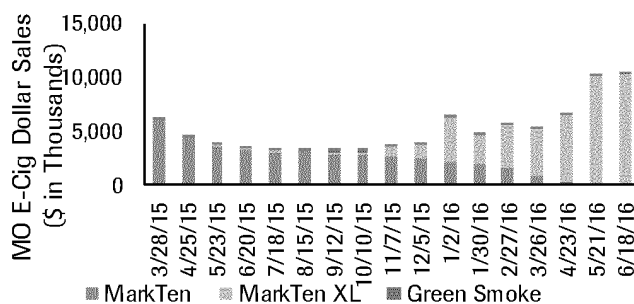


Source: The Nielsen Company and Cowen and Company

### Altria (MarkTen)

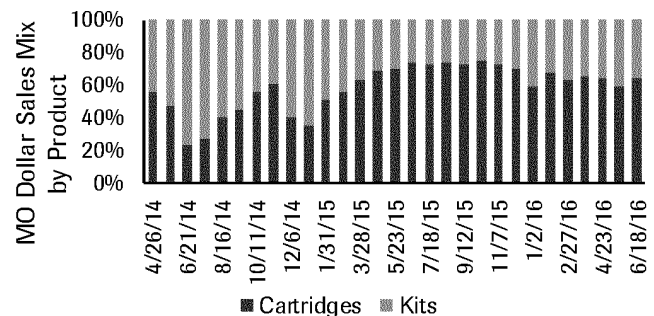
- For Altria, MarkTen XL has been a nice growth driver for the company, as it looks to have replaced their original offering, and driven incremental consumers into the brand. Since launching the product in test markets in April 2015, MarkTen XL now accounts for 98% of MO dollar sales, according to Nielsen. During that same time frame, MO has seen its dollar share of the category grow from ~7% to ~16%. MO management has said consumers have been more satisfied with MarkTen XL compared to earlier generation MarkTen products, given XL's bigger tank and longer battery life. As it is still early days for MarkTen XL, it is encouraging to see that kit sales remain a healthy contributor to MO's overall vapor sales.

Figure 12 MarkTen XL has Seemingly Replaced Earlier Gen Products...



Source: The Nielsen Company and Cowen and Company

Figure 13 ...Cartridge Sales Suggest Consumer Retention has Improved

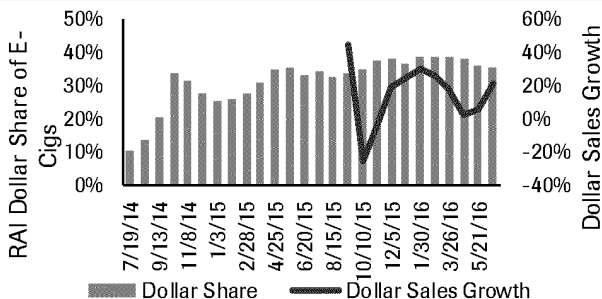


Source: The Nielsen Company and Cowen and Company

### Reynolds (Vuse)

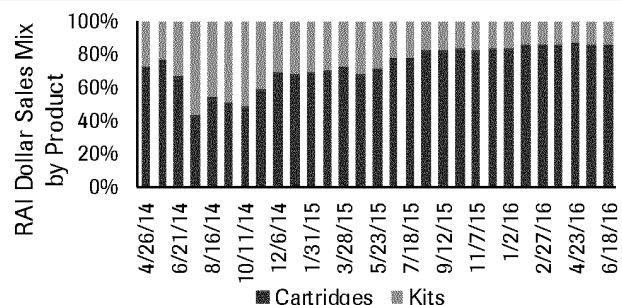
- For Vuse, the brand has held its share and remained the market leader, despite competition and innovation from competitors. More impressively, Vuse consumers seem to be continually using the product as cartridge contribution to retail sales is now 85%. To be sure, we've also seen innovation from Vuse. RAI expanded further within the e-cig category with the introduction of Vuse Connect, which features wifi capabilities that connect to an app which offers child locking capabilities, as well as usage and battery tracking. RAI also launched Vuse FOB, a palm sized e-cig with digital display. However these products are only sold online, and would therefore not be captured in Nielsen-tracked channels. In addition, RAI has two other products in the pipeline, including Vuse Port (a closed-system tank product) and Vuse Pro (a refillable cartridge system featuring a bigger battery).

Figure 14 Vuse is Still the Market Leader and Growing



Source: The Nielsen Company and Cowen and Company

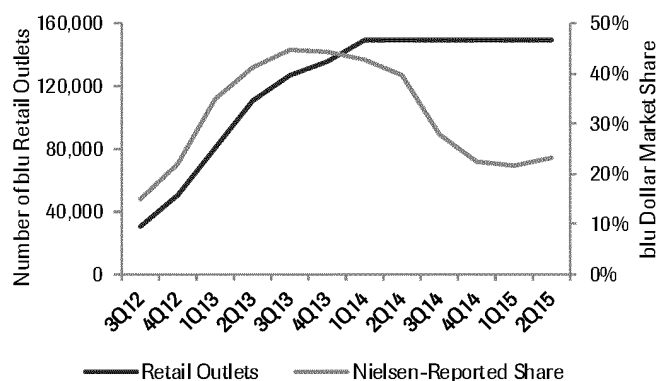
Figure 15 Consumers Continue to Adopt and Consistently Use Vuse



Source: The Nielsen Company and Cowen and Company

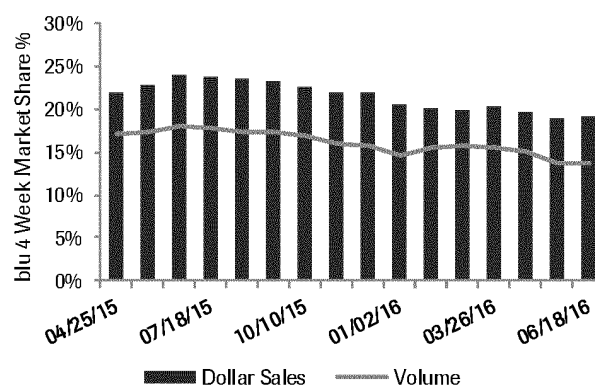
While these trends are all encouraging, we would caution that this growth could simply reflect more trial, driven by distribution gains, as we have seen this phenomenon before. As a reminder, from 2012 to 2014, we saw blu's distribution increase approximately 4x to ~150,000, accompanied by meaningful share gains. However, as distribution growth slowed, so did share gains, which ultimately began to fall after the brand reached full retail penetration. While the sharp share declines were partially due to the national launches of Vuse and MarkTen, and we've since seen blu's brand share level off in the ~20% range, the company's share is down ~50% from 2013.

Figure 16 Distribution And Trial Is Likely Driving Some of the Recent Category Growth...



Source: Company Reports, The Nielsen Company and Cowen and Company

Figure 17 ...As We Have Seen in the Past



Source: The Nielsen Company and Cowen and Company

With the cut-off date for new innovation rapidly approaching, it sets up these four players as likely best positioned to consolidate market share. We look for companies across our coverage to launch any products ready for production ahead of the August 8<sup>th</sup> deadline. Admittedly, there are a lot of unknowns as it relates to how the category will innovate under FDA regulation. Costly FDA user and application fees will present a barrier for most small player. That said, even big players will likely have trouble getting products on the market in a timely fashion, as company's would need to go through the PMTA approval process, which the FDA anticipate will take 180 days, but could take much longer given the plethora of applications the FDA will need to sort through for products already on the market that do not meet the grandfather date.

Ticker	Rating	Price*	Price Target	Ticker	Rating	Price*	Price Target
MO	Market Perform	\$68.73	\$67.00	IMB.LN	Outperform	3,994.50p	4,390.00p
2914.JP	Market Perform	¥4,219.00	¥4,800.00	RAI	Outperform	\$51.83	\$57.00

\*As of 07/21/2016

## Valuation Methodology And Risks

### Valuation Methodology

#### Tobacco:

Our valuation methodology is primarily based on Price-to-Earnings (P/E), followed by Relative Price-to-Earnings (vs. the respective relative index) as well as Enterprise Value to EBITDA (EV/EBITDA). In cases where GAAP net income includes large, non-cash items (e.g., restructuring charges or the resolution of disputed MSA), we may use non-GAAP EPS.

### Investment Risks

#### Tobacco:

Global tobacco demand is subject to a number of potential headwinds. Most notably, increased awareness of the risks associated with traditional tobacco use, and resultant regulatory actions (e.g., indoor smoking bans, enlarged textual or graphic warnings, and / or plain packaging) can negatively impact smoking incidence and/or per capita consumption, and thus industry volumes. What is more, the industry is also subject to risk from disruptive tax increases, which result in higher prices, and can also depress consumption. Further, while diminished, litigation risk also exists.



# Addendum

## Stocks Mentioned In Important Disclosures

Ticker	Company Name
MO	Altria Group
IMB.LN	Imperial Brands
2914.JP	Japan Tobacco
RAI	Reynolds American

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**Assumption:** The expected total return calculation includes anticipated dividend yield

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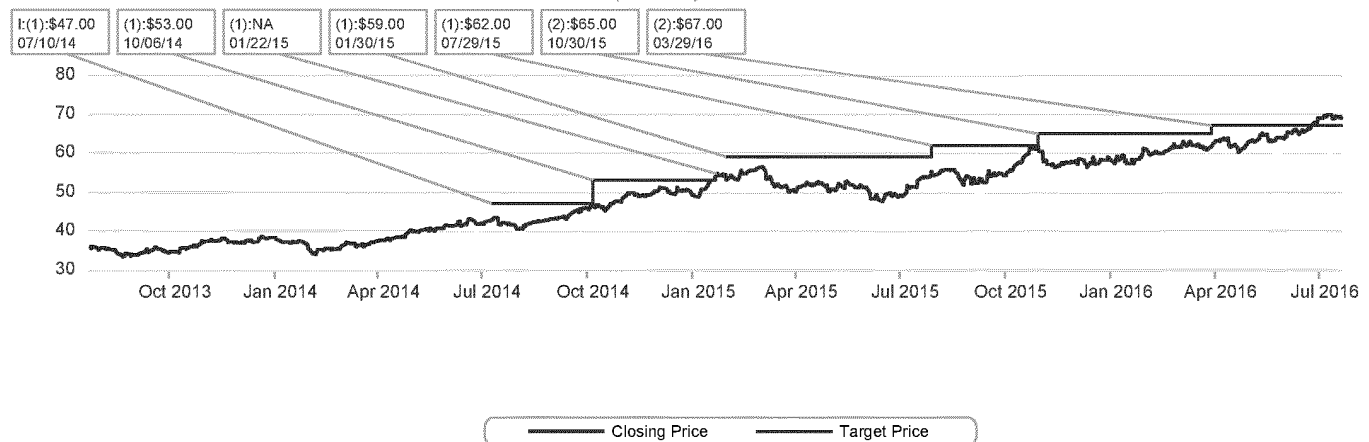
Rating	Count	Ratings Distribution	Count	IB Services/Past 12 Months
Buy (a)	440	59.22%	69	15.68%
Hold (b)	293	39.43%	13	4.44%
Sell (c)	10	1.35%	0	0.00%

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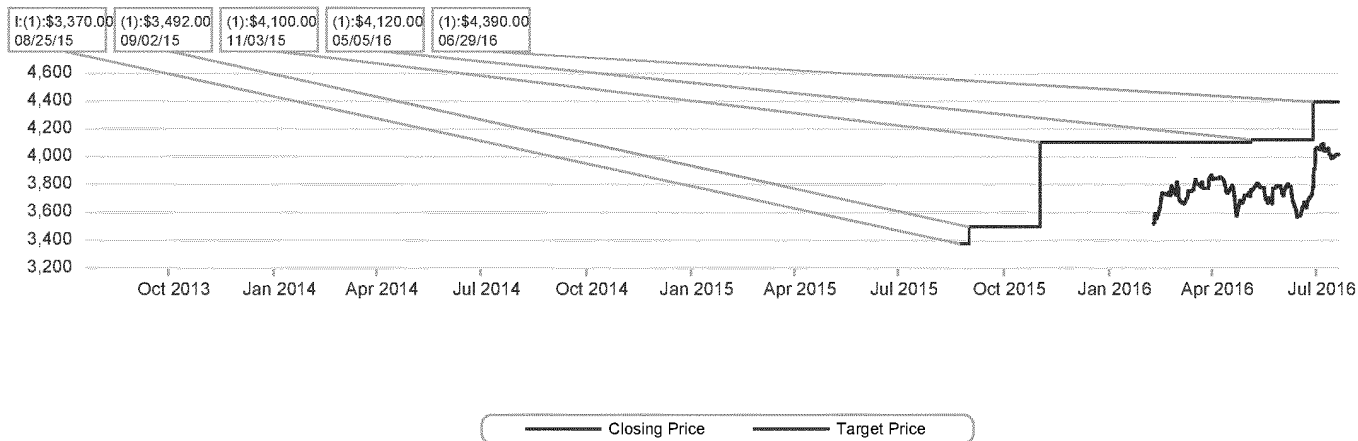
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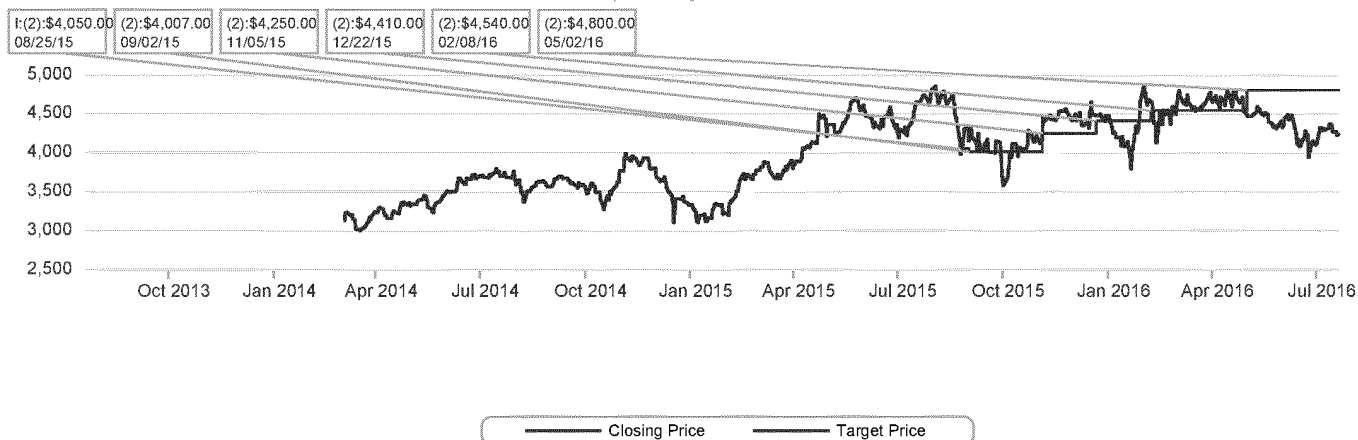
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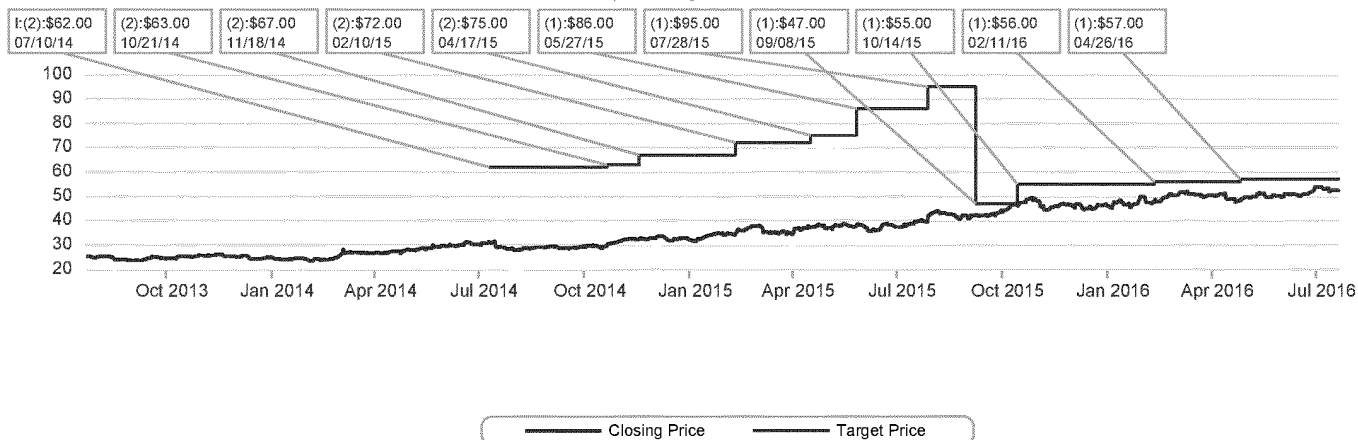
### Japan Tobacco Equity Research Rating History as of 07/20/2016

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


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I = Initiation | 1 = Outperform | 2 = Market Perform | 3 = Underperform | UR = Price Target Under Review | T = Terminated Coverage | \$xx = Price Target | NA = Not Available |  
S=Suspended

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